

**TENDER FOR  
ANNUAL CONTRACT FOR OPERATION AND MAINTENANCE  
OF 33/0.433kV SUBSTATION AND OTHER  
ELECTRICAL INSTALLATIONS AT NSIC- EMDBP,  
KAMALANAGAR, KUSHAIGUDA, ECIL POST OFFICE  
HYDERABAD -500 062**



<b>Last Date &amp; Time of Submission of Tender</b>	<b>:</b>	<b>16<sup>th</sup> Sep' 2016 at 03:00 PM</b>
<b>Pre-Bid Meet</b>	<b>:</b>	<b>09<sup>th</sup> Sep' 2016 at 11:00 AM</b>
<b>Date &amp; Time of Opening of Technical Bid</b>	<b>:</b>	<b>16<sup>th</sup> Sep' 2016 at 04:00 PM</b>
<b>Date of Opening of Price Bid</b>	<b>:</b>	<b>To be communicated later.</b>

**THE NATIONAL SMALL INDUSTRIES CORPORATION LTD.**

(A Govt. of India Enterprise)

**Exhibition-Cum- Marketing Development Business Park**

Module No: 207, Kamalanagar, Kushaiguda, ECIL Post Office, Hyderabad 500 062

Ph: 040-27141422, 27125802, Fax: 27141411.

Website: <http://www.nsic.co.in>

**THE NATIONAL SMALL INDUSTRIES CORPORATION LTD.**

(A Govt. of India Enterprise)

**Exhibition-Cum- Marketing Development Business Park,**

Module No.-207, Kamalanagar, Kushaiguda, ECIL Post Office,

Hyderabad - 500062

Ph: 040-27141422, 27125802, Fax: 27141411, Email: [emdbphyd@nsic.co.in](mailto:emdbphyd@nsic.co.in)

**Ref: NSIC/EMDBP(HYD)/AMC-E-I/2010**

**Date: 01/09/2016**

M/s. -----  
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**Subject: Annual Contract for Operation & Maintenance of 33/0.433kV Substation and Other Electrical Installations at NSIC-EMDBP, Kamalanagar, Kushaiguda, ECIL Post Office, Hyderabad.**

Sir,

Tender documents in respect of the above mentioned works containing 34 pages as detailed on page 4 (Index) are forwarded herewith. *Please note that tender is to be delivered in the office of the General Manager, NSIC-EMDBP, Module 207, Kamalanagar, Kushaiguda, ECIL Post Office, Hyderabad-500 062 upto 3.00P.M. on 16/09/2016.*

The Tender should be signed, dated and witnessed in all places provided for in the documents, all other papers should be initialled.

The tender should be accompanied by Earnest Money Deposit (EMD) in the form of demand draft as mentioned in Appendix. Tenders without earnest money deposit shall be summarily rejected. The tenders will be opened at 4.00 P.M. on 16/09/2016 and price bid of the technically qualified tenderers will be opened on a later date. All technically qualified tenderers will be intimated accordingly.

**The person, signing the tender on behalf of another person or on behalf of firm shall attach with tender a certified copy of the power of attorney on a non-judicial stamp paper of requisite value duly executed in his favour by such person or all the partners of the firm and must state specifically that he has authority to sign such tenders for and on behalf of other person or firm as the case may be, and in all matters pertaining to the contract including arbitration clause.**

This letter shall form part of the "CONTRACT" and must be signed and returned along with the tender documents.

Yours faithfully

Encl: 34 pages

**General Manager  
NSIC- EMDBP, Hyderabad**

(Authorized signatory of the tenderer with seal.)

**TENDER NOTICE FOR ANNUAL CONTRACT FOR OPERATION & MAINTENANCE OF 33/0.433KV SUBSTATION AND OTHER ELECTRICAL INSTALLATIONS AT NSIC-EMDBP, KAMALANAGAR, KUSHAIGUDA, ECIL POST OFFICE, HYDERABAD**

**Ref: NSIC/EMDBP(HYD)/AMC-E-I/2010**

**Date: 01/09/2016**

Sealed quotations are hereby invited from the eligible parties under **two bids** system i.e. **Technical Bid & Price Bid** for Annual Contract for Operation & Maintenance of 33/0.433kV Substation and Other Electrical Installations at NSIC-EMDBP, Kamalanagar, Kushaiguda, ECIL Post Office, Hyderabad as per the terms and conditions mentioned in the tender document.

<b>Name of the work</b>	<b>Earnest Money Deposit</b>	<b>Issue of Blank Tender Document</b>	<b>Last Date of Submission Tender</b>
Annual Contract for Operation & Maintenance of 33/0.433kV Substation and Other Electrical Installations at NSIC-EMDBP, Kamalanagar, Kushaiguda, ECIL Post Office, Hyderabad.	Rs. 15000/-	From 01/09/2016 to 15/09/2016	Date 16/09/2016 upto 3.00 PM

- Blank tender documents (non-transferable) for above work shall be issued from 01/09/2016 to 15/09/2016 on working days from the address given below on payment of required tender fee of Rs. 500/- (Rupees five hundred only) (non-refundable) in form of cash/Demand Draft/pay order/bankers cheque in favour of "The National Small Industries Corporation Ltd.", payable at Hyderabad.  
The intending tenderers can also download the complete tender document available on the website [www.nsic.co.in](http://www.nsic.co.in) and submit the same along with requisite tender fee & earnest money deposit in the form of Demand Draft/pay order/bankers cheque drawn on a scheduled/nationalized bank in favour of "The National Small Industries Corporation Ltd.", payable at Hyderabad alongwith supporting documents as per the details provided hereinafter in the tender document by the due date. The tenderers registered with The National Small Industries Corporation Ltd. under **Single Point Registration Scheme** shall be exempted from cost of tender and the EMD.
- The intending tenderers should have valid registration with Sales tax, Works Contract tax, Service tax, EPF organization, ESI authorities etc. as applicable.
- Tender documents can be purchased from the office of the General Manager, NSIC - EMDBP, Module No.- 207, Kamalanagar, Kushaiguda, ECIL Post Office, Hyderabad- 62, on all working days between 10.00 AM to 6.00 PM except on holidays and Saturdays & Sundays, after payment of requisite tender cost as mentioned above.
- The tender documents duly completed along with EMD in form of demand draft/pay order/bankers cheque drawn on a scheduled/nationalized bank in favour of "The National Small Industries Corporation Ltd." payable at Hyderabad will be submitted at the office of General Manager, NSIC-EMDBP, Module No. - 207, Kamalanagar, Kushaiguda, ECIL Post Office, Hyderabad- 62, upto 3.00 PM on 16/09/2016.

5. Any tender without tender fee and EMD shall be summarily rejected.
6. The Earnest Money Deposit will be refunded to the unsuccessful tenderer only after finalization of the contract. In case of the successful tenderer EMD will be refunded after receipt of the performance security deposit. No interest will be paid on the EMD.
7. NSIC reserves the right to reject any or all the tender without assigning any reason thereof and also not bound to accept lowest tender. Tenders in whom any of the prescribed conditions are not fulfilled or found incomplete in any respect are liable to be rejected.
8. Canvassing whether directly or indirectly in connection with tender is strictly prohibited and the tender submitted by the tenderers who resort canvassing will be liable to be rejected.
9. The technical bid submitted by the parties shall be opened on the same day i.e. last date of submission at 4.00 pm in the presence of tenderers who wish to be present. The price bids of technically qualified parties shall be opened at a later date and the technically qualified parties shall be informed in advance about the opening of their price bid.

**General Manager,  
NSIC -EMDBP, Hyderabad**

**THE NATIONAL SMALL INDUSTRIES CORPORATION LTD.**  
(A Govt. of India Enterprise)  
**Exhibition-Cum- Marketing Development Business Park,**  
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Ph: 040-27141422, 27125802, Fax: 27141411, Email: [emdbphyd@nsic.co.in](mailto:emdbphyd@nsic.co.in)

**Ref: NSIC/EMDBP(HYD)/AMC-E-I/2010**

**Date: 01/09/2016**

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## **INSTRUCTIONS TO TENDERERS**

### **1. GENERAL:**

Tenderers are advised to acquaint themselves fully with the description of work, scope of services, time schedule, terms and conditions including all the provisions of the tender document before framing up their tender.

### **2. SITE PARTICULARS:**

Tenderers are advised to inspect and examine the site and its surroundings and satisfy themselves before submitting their tenders as to nature of work, site conditions etc. Non- familiarity with the site conditions will not be considered a reason either for extra claims or for not performing the work in strict conformity with the tender conditions. For site any clarification/ information/Assistance, the intending tenderers may contact the General Manager, NSIC- EMDBP, Module No.-207, Kamalanagar, Kushaiguda, ECIL Post Office, Hyderabad- 500062.

### **3. QUALIFYING CRITERIA FOR TENDERER:**

Only those tenderers are eligible for award of work who fulfill the following criteria:

- a. The tenderer should be 'A' Class/Grade registered Electrical Contractor.
- b. The tenderer should be registered with the appropriate registration authority (labour commissioner etc.).
- c. The tenderer should have minimum three years experience in operation and maintenance of atleast 11/0.433kV or higher capacity Substation, 1000kVA or higher capacity transformer, Auto Power Factor Correction panels, 500kVA or higher capacity DG Set including its Auto Mains Failure panel, HT & LT Cables and other associated electrical installations with Public Sector Companies/Banks /Government Departments/Research Organizations/Reputed Private Sector Companies. *(Please enclose relevant Work Orders/Experience Letters etc. in the Technical Bid)*
- d. The tenderer should have successfully executed at least;
  - One similar work of 7.68 lacs or more;  
OR
  - Two similar works of 5.76 lacs or more;  
OR
  - Three similar works of 3.84 lacs or more;

during the last three years.

Similar works means operation and maintenance of 11kV or higher voltage capacity Substations. *(Please enclose Work Orders/Experience Letters etc. in the Technical Bid)*.

- e. The tenderer should have valid registration with appropriate authorities under Employees Provident Fund Organisation (EPFO) and Employees' State Insurance Corporation (ESIC).
- f. The tenderer should have valid registration with Service Tax Department.
- g. The tenderer should have valid registration with Sales Tax, Work Contract authorities, as applicable.
- h. The tenderer should have at least 10 employees on its payroll specifically trained for operation and maintenance services of Electrical Substation, Operation of D.G. Set & other allied electrical equipment.
- i. Either the Registered Office or one of the Branch Office of the tenderer should be located in Hyderabad.

#### 4. SUBMISSION OF TENDER:

- a. The expression “Tender Notice” referred to in the Tender Documents shall be deemed to include any Notice / Letter Inviting Tender with respect to the work forming the subject matter of the documents and vice-versa.
- b. The tender complete in all respects shall be submitted along with Earnest Money as stipulated in the Notice / Letter Inviting Tender ONLY. Tenders without Earnest Money Deposit will be out rightly rejected.

*Tenders shall be submitted in two separate sealed envelopes Superscribed as following:*

#### **ENVELOPE – I (TECHNICAL BID)**

Name of work : Annual Contract for Operation & Maintenance of  
33/0.433kV Substation and Other Electrical Installations at  
NSIC-EMDBP, Kamalanagar, Kushaiguda,  
ECIL Post Office, Hyderabad – 500 062

Tender Ref no. : NSIC/EMDBP(HYD)/AMC-E-I/2010

Due date & time of opening : 16.09.2016 at 16:00 Hrs

Addressed to : General Manager,  
The National Small Industries Corporation Ltd.,  
Exhibition-Cum-Marketing Development Business Park,  
Kamalanagar, Kushaiguda, ECIL Post Office,  
Hyderabad – 500 062

From : Name & Address of the Tenderer

The Envelope-I (Technical Bid) shall contain the following: -

- EMD of requisite amount in the form of Demand Draft drawn on a scheduled/nationalized bank in favour of ‘The National Small Industries Corporation Ltd.’ payable at Hyderabad. Cheque will not be accepted.
- Tenderers who have downloaded the tender document from NSIC website should also place a Demand Draft of requisite amount drawn on a scheduled/ nationalized bank in favour of “The National Small Industries Corporation Ltd., payable at Hyderabad towards **tender fee** in this envelope. Cheque will not be accepted.
- The tenderers registered with NSIC under Single Point Registration Scheme (SPRS) of Government Purchase Programme should also place a self-attested photocopy of registration certificate issued by NSIC under Single Point Registration Scheme in this envelope for availing exemption of earnest money/ tender cost.
- Copy of valid "A" Class Electrical Contractor license.
- Copy of valid labour License
- Copy of valid Service tax registration Number.
- Copy of PAN card.
- Copy of valid Service tax registration Number.
- Copies of valid EPFO and ESIC registration.

- Copy of Sales Tax/TIN number, if applicable.
- Copy of Latest ITR.
- Copy of Work Orders/Experience Certificates from the clients regarding the similar services rendered during last three years as described in the qualifying criteria.
- Partnership Deed in case of partnership firm.
- Memorandum & Articles of Association in case of limited Company.
- Power of Attorney in favour of person who has signed the tender document. In case of limited company, the authority to sign the tender is to be given under Board resolution.
- The entire tender document except the Price Bid part with each page duly signed by the tenderer.

**NOTE:**

- All the photocopies of the documents enclosed with the Technical Bid in support of qualifying criteria should be signed by the tenderer/ authorized person.
- The Technical Bid (Envelope-I) should not contain any financial information related to rates of items etc. The Price Bid must be submitted in a separate sealed envelope (i.e. Envelope-II).

**ENVELOPE – II (PRICE BID)**

Name of work : Annual Contract for Operation & Maintenance of  
33/0.433kV Substation and Other Electrical Installations at  
NSIC-EMDBP, Kamalanagar, Kusaiguda,  
ECIL Post Office Hyderabad – 500 062

Tender Ref no. : NSIC/EMDBP(HYD)/AMC-E-I/2010

Addressed to : General Manager,  
The National Small Industries Corporation Ltd.,  
Exhibition-Cum-Marketing Development Business Park,  
Kamalanagar, Kusaiguda, ECIL Post Office  
Hyderabad – 500 062

From : Name & Address of the Tenderer

The Envelope-II shall contain the Price Bid portion of the tender in prescribed format. It is to be noted that Envelope-II shall contain only **PRICES** and no conditions i.e. deviations / assumptions / stipulations / clarifications / comments / any other request whatsoever. Any conditional offer will be rejected.

***Both the sealed envelope i.e. Envelope-I and Envelope-II shall be put in another third envelope and sealed properly superscribed with “Tender for Annual Contract for Operation & Maintenance of 33/0.433kV Substation and Other Electrical Installations at NSIC-EMDBP, Kamalanagar, Kusaiguda, ECIL Post Office, Hyderabad.”***

**5. ABNORMAL RATES:**

The tenderer is expected to quote rate after careful analysis of costs involved for satisfactory execution of the work considering technical qualification, experience of the required manpower and conditions of contract. This will avoid a loss of profit or gain in case of curtailment or change of specifications for any item. If it is noticed that the rates quoted by the Tenderer are usually high or



unusually low, it will be sufficient cause for rejection of the tender unless the Corporation is convinced about the reasonableness of the rates on scrutiny of the analysis for such rates to be furnished by the tenderer on demand. Notwithstanding anything here in stated, the rates once accepted by the Corporation shall be final and shall not be subject to any change either on account of un- workability of rates or on any other ground whatsoever.

## **6. DEVIATIONS TO TENDER CLAUSES**

**Tenderers are advised to submit the tenderers strictly based on the terms and conditions and scope of work contained in the Tender Document and not to stipulate any deviations. Conditional tenders are liable to be rejected.**

## **7. VALIDITY OF OFFER:**

Tender submitted by tenderers shall remain valid for acceptance for a minimum period of 120 days from the date of opening of the tenders. The tenderers shall not be entitled during the said period of 120 days, to revoke or cancel their Tender or to vary the Tender given or any term thereof, without the consent in writing of the Corporation. In case of tenderers revoking or cancelling their tenders or varying any terms in regard thereof without the consent of the Corporation in writing, the Corporation shall forfeit Earnest money paid by them along with their tender without giving any notice.

## **8. AWARD OF WORK:**

The Corporation reserves the right to split the job into two or more parts and to award the work to separate agencies/Contractors. Work shall be awarded to the lowest tenderer, subject to the work experience and fulfilment of other terms & conditions and specifications. However, NSIC does not bind itself to award the work to L-1 or any tenderer and may cancel the tender in full or part without assigning any reason whatsoever.

## **9. ACCEPTANCE / REJECTION OF TENDER:**

- a. The Corporation does not bind itself to accept the lowest tender.
- b. The Corporation also reserves the right to accept or reject any tender in part or full without assigning any reason whatsoever.
- c. The Corporation also reserves the absolute right to reject any or all the tenders at any time solely based on the past unsatisfactory performance by the tenderer(s) the opinion/decision of NSIC regarding the same shall be final and conclusive.

## **10. CORRECTIONS**

No corrections or overwriting will be entertained in the Price Bid by using correcting fluid. All correction in Price Bid should be initialled.

## **11. FIRM RATES.**

**The rates quoted by tenderer shall remain firm till completion of all works even during the extended period, if any, on any account what so ever. It may be noted that no deviation on this account will be acceptable and offer not containing firm price shall not be considered.**

12. Any addendum/corrigendum issued shall form a part of the tender document. There will not be any press notification on addendum/corrigendum. The prospective tenderers are required to visit NSIC website and CPP portal for all such addendum/corrigendum to this tender document.
13. It will be obligatory on the part of the tenderer to sign the tender documents for all the components & parts. After the work is awarded, he will have to enter into an agreement on proforma to be provided by the Corporation for work awarded, on a non-judicial stamp paper of requisite value at his own cost within ten days of the award of the work.

14. The Earnest Money Deposit will be refunded to the unsuccessful tenderer only after finalization of the contract. In case of the successful tenderer EMD will be refunded after receipt of the performance security deposit. No interest will be paid on the EMD.
15. A check list of documents/fees etc. is provided on the next page. Tenderers are requested to fill up the response column (Yes/No) before submitting the tender.

**General Manager,  
NSIC-EMDBP, Hyderabad**

## **CHECKLIST OF DOCUMENTS/FEES ETC.**

**Name of the Tenderer:** \_\_\_\_\_

<b>S.No.</b>	<b>Item Required</b>	<b>Response (Yes/No)</b>
<b>1.</b>	Has the tenderer paid the tender document fees or submitted the copy of Valid GP Certificate issued by NSIC for tender fee exemption in the prescribed form	
<b>2.</b>	Has the tenderer submitted the requisite EMD in the prescribed form or the copy of valid GP Certificate issued by NSIC for EMD exemption along with the Technical Bid (Envelope-I)	
<b>3.</b>	Has the tenderer/ authorized representative of the tenderer signed/initialled all the pages of the tender document along with supporting documents required and has enclosed the same in the Technical Bid (Envelope-I)	
<b>4.</b>	Has the Power of attorney/Authority been submitted in the name of authorized representative on a non-judicial stamp paper/under Board Resolution (if applicable).	
<b>5.</b>	Has the tenderer submitted all the required documents in support of Qualifying criteria	
<b>6.</b>	Does the Technical Bid (Envelope-I) contain any financial information pertaining to Price Bid	
<b>7.</b>	Is the Price Bid (Envelope-II) submitted separately in a sealed envelope	

**(Authorized signatory of the tenderer with seal.)**

## **GENERAL CONDITIONS OF CONTRACT**

1. Corporation shall mean 'The National Small Industries Corporation Limited (A Government of India Enterprise) "NSIC Ltd., NSIC Bhawan, Okhla Industrial Estate New Delhi-110020 and shall include their legal representatives, successors and permitted assigns.

2. Where the context so requires, words importing the singular only also include the plural and vice versa.

### **3. DEFINITIONS:**

- a. The 'Contract' means and includes the documents forming the tender and acceptance thereof together with the documents referred to therein including the conditions, the specifications, designs, drawing and instructions issued from time to time by the 'Engineer-in-Charge' the formal agreement executed between the Corporation and the Contractor, and all these documents taken together shall be complementary to one another.
- b. The 'Site' shall mean the land and / or other places on, into or through which work is to be executed under the contract or any adjacent land, path or street which may be allotted or used for the purpose of carrying out the contract.
- c. The 'Contractor' shall mean the individual or firm or company, whether corporate or not, undertaking the works and shall include the legal personal representative or such individual or the persons composing such firm or company and the permitted assignee of such individual or firm or company.
- d. The 'Competent Authority' means the Chairman cum Managing Director of the Corporation and his successors.
- e. 'Party' shall mean either 'The National Small Industries Corporation Ltd., New Delhi' or the "Contractor, as the case may be. 'Parties' shall mean both of them.
- f. The Engineer-in-Charge means the Technical Officer of the Corporation, as the case may be who shall supervise and be the In-charge of the works.
- g. The General Manager means the officer who holds the charge of that post in the Corporation during the currency of this agreement, to act on behalf of the Chairman of the NSIC Ltd.
- h. 'IS Specification' means the Specification of latest edition with amendments, if any, up to time of receipt of tender by the Corporation issued by the Bureau of Indian Standards as referred to in the specifications and / or work orders.
- i. The 'Contract Sum' means the sum agreed, or the sum calculated in accordance with the prices accepted by the NSIC in the tender and / or the contract / negotiated rates payable on completion of the works.
- j. The 'Final Sum' means the amount payable under the Contract by the Corporation to the Contractor for the full and entire execution and completion of works, in time.
- k. The 'Date of Completion' is the date/date(s) for completion of the whole works, set out in the tender documents, or any subsequently amended by the Corporation.
- l. A 'Week' means seven days without regard to the number of hours worked or not worked in any day in a week.
- m. Excepted Risks' are risks due to riots (otherwise than among Contractor's employees and civil commotion (in so far as both these are uninsurable) war (whether declared or not), invasion act of foreign enemies, hostilities civil war, rebellion, revolution, insurrection military or usurped power, Acts of God, such as earthquake, lightening, unprecedented floods and other causes over

which the Contractor has no control and accepted as such by the Chief Competent Authority or causes solely due to use or occupation by the ‘Corporation’ of the part of works in respect of which a certificate of completion has been issued.

- n. ‘Urgent works’ shall mean any urgent measures which in the opinion of the Engineer-in-Charge, become necessary during the progress of the work to obviate any risk or accident or failure or which become necessary for security.
- o. The ‘Works’ shall mean the works to be executed in accordance with the contract or part(s) thereof as the case may be and shall include all extra or additional, altered or instituted works or temporary and urgent works as required for performance of the contract.

#### 4. CONTRACT DOCUMENTS:

The Contractor shall be provided, free of charge, one certified true copy of the Contract Documents and of all further drawings, which may be issued during the progress of the Works. He shall keep these Documents on the Site in good order.

#### 5. WORKS TO BE CARRIED OUT:

The work to be carried out under the Contract shall, except as otherwise provided in these conditions, include all labour, materials, tools, plant, equipment and transport which may be required in preparation of and for and in the full and entire execution and completion of the works.

#### 6. INSPECTION OF SITE:

The Contractor shall inspect and examine the Site and its surrounding and shall satisfy himself before submitting his tender as to the nature of the ground and subsoil (so far as is practicable), the form and nature of the Site, the quantities and nature of works and material necessary for the completion of the Works and the means of access to the Site, the accommodation he may require and in general shall himself obtain all necessary information as to risks, contingencies and other circumstances which may influence or affect this tender. No extra charges consequent on any misunderstanding or otherwise shall be allowed.

#### 7. MANPOWER:-

- a. The Contractor shall engage only such workers, whose antecedents have been thoroughly verified, including character and police verification and other formalities. The Contractor shall be fully responsible for the conduct of his staff.
- b. At least, the following minimum technical manpower (qualified & experienced) shall be deployed by the Contractor at site to ensure round-the-clock operation & maintenance of services on all days of the month

S.No.	Manpower	A Shift	B Shift	C Shift	G Shift
1	Electrician	1	1	1	-
2	Trained Engineer/Supervisor	-	-	-	1

Working hours or man power deployed

General (G) shift	-	9:00 Hrs to 13:00 Hrs & 14:00 Hrs to 18:00 Hrs except on Sunday/Holidays.
A’ Shift	-	6:00 Hrs to 14:00 Hrs
B’ Shift	-	14:00 Hrs to 22:00 Hrs
C’ Shift	-	22:00 Hrs to 06:00 Hrs

- c. Contractor shall deploy his persons in such a way that they get weekly rest. The Contractor shall arrange to provide reliever equally qualified in case of absence/leave/off etc. The Contractor shall in all dealings with the persons in his employment have due regards to all recognized festivals, days of rest and religious or other customs.
- d. The Contractor should ensure to maintain adequate no. of manpower as mentioned above and also maintain a pool of stand-by staff. In case any staff absences from the duty, the reliever of equal status shall be provided by the Contractor from an existing pool of staff. **(Reliever should be arranged by the Contractor in quoted rates.)**
- e. It shall be the responsibility of the Contractor to arrange for deployment of operating /maintenance team beyond normal working hours /on holidays etc. whenever need arises such as for completion of the on-going maintenance/testing etc. and/or to meet any exigency without additional cost.
- f. The Contractor should quote the rates keeping in mind the fully qualified & trained staff to be deployed for all shift operation & general maintenance & attending all types of breakdown and the complete responsibility of all electrical faults lies on the Contractor.
- g. Absence of any person for any working days will be treated as absence/deficiencies in service for which necessary deduction will be made from the bill.
- h. The minimum qualification and experience of the deployed manpower is as under:
  - **Electrician - Skilled**: Having Certificate in Electrician/Wireman trade issued by ITI/Local authorities/Govt. of India and with minimum 3 years relevant experience in the operation & maintenance of electrical fitting, fixtures and industrial wiring.
  - **Supervisor - Highly Skilled**: Having Degree/Diploma in electrical engineering with a minimum 3 years experience in satisfactory operation and maintenance of 11kV or high capacity Substation. **The supervisor deployed must possess valid electrical license/electrical competence certificate.**
- i. The knowledge/Information of availability of manpower on daily basis shall be responsibility of Contractor/selected agency and the same shall be communicated to the Engineer-in-Charge. The Contractor should ensure availability through his representative throughout the contract period who shall be responsible for manpower availability and their record keeping.
- j. The selected agency will be required to pay minimum wages applicable for 'A' Area, prescribed under the 'Minimum Wages Act' declared by State Government or Central Government, whichever is higher along with other statutory contribution such as PF, ESI, Bonus etc.
- k. If the rates quoted are found below the minimum wages for the pertinent category, tender will be rejected.
- l. The tenderer shall pay at-least the minimum bonus to the staff deployed in accordance with the Payment of Bonus Act, 1965 irrespective of the profitability or otherwise of the tenderers' business.
- m. The Contractor shall comply all provision of Contract labour (Regulation and Abolition) Act 1970 and rules framed there under other labour laws affecting contract labour that may be brought in to time to time.
- n. The Contractor at all times should indemnify NSIC against all claims, damages or compensation under the provisions of Payment of Wages Act, 1936, Minimum Wages Act 1948, Employer's Liability Act 1938, the Workmen Compensation Act 1923, Industrial Disputes Act 1947, Maternity Benefit Act 1961, Payment of Bonus Act, 1965 or any other law relating thereto and rules made there under from time to time. NSIC will not own any responsibility in this regard.
- o. The Contractor shall be solely responsible for the redressal of grievances/ resolution of disputes relating to person deployed. NSIC shall, in no way, be responsible for settlement of such issues whatsoever.

## **8. SUFFICIENCY OF TENDER:**

The Contractor shall be deemed to have satisfied himself before tendering as to the correctness and sufficiency of his tender for the works and of the rates and prices quoted in the Price Bid.

9. The Contractor is required to approach the Corporation for execution of agreement for the said work as per the prescribed proforma to be provided by the Corporation on a non-judicial stamp paper of Rs.100/- or requisite value whichever is higher within 10 days from the issue of the letter of award.

## **10. SAFETY CODE:**

- a. The Contractor shall at his own expense arrange for the safety provisions as appended to these conditions or as required by the Engineer-in-Charge, in respect of all labour directly or indirectly employed for performance of the works and shall provide all facilities in connection therewith. In case the Contractor fails to make arrangements and provide necessary facilities as aforesaid the Engineer-in-Charge shall be entitled to do so and recover cost thereof from the Contractor.
- b. The Contractor shall provide and maintain at his own expenses, safety shoes, safety helmets, insulation gloves of appropriate rating, gum boots, rain coats, safety belts and any other personal protective equipment, when and where necessary or required by the Engineer-in-Charge for the protection of the works or for the safety and convenience of those employed on the works or the public.
- c. The corporation shall not be liable for any accident, injury or for any other mishap caused to him/them/their employees/agents and labour employed by the Contractor and for any kind of damage during the execution of the contract or work done. For any kind of such injury or loss caused to any person/persons mentioned herein above, the Contractor shall be exclusively liable.

## **11. DISCREPANCIES AND ADJUSTMENT OF ERRORS:**

The several documents forming the contract are to be taken as mutually explanatory of one another:

- a. In the case of discrepancy between Price Bid the Specifications and/or the Drawings, the following order of preference shall be observed:
  - i. Description in the Price Bid.
  - ii. Particular Specification and Special Conditions, if any.
  - iii. General Conditions.

If there are varying or conflicting provisions made in any one documents forming part of the Contract, the Accepting Authority shall be the deciding authority with regard to the intention of the document.

- b. Any error in description, quantity or rate in the Price Bid or any omission there from shall not vitiate the Contract or release the Contractor from the execution of the whole or any part of the Works comprised therein according to drawings and specifications or from any of his obligations under the Contract.

## **12. TERMINATION:**

- a. Notwithstanding anything contained hereinbefore to the contrary, the NSIC shall have full power and authority to terminate this Agreement without assigning any reason by giving 15 (Fifteen) days clear notice in writing and in such case the Contractor shall have no claim for any loss and damage against the NSIC. If the Contractor abandons his service for which he/she is committed to the NSIC, all his/ her dues e.g. EMD, Security Deposit, etc. will be forfeited by the Centre.
- b. The NSIC reserves the exclusive right to suspend, cancel, terminate this Agreement at any time if

it has sufficient reason to believe that the Contractor has failed to perform or observe or fulfill any of the terms and conditions hereinbefore contained and/or liable and responsible for any loss or damage suffered by the NSIC.

- c. On termination of the Agreement, the Contractor must immediately, i.e., within 24 hours, withdraw its men and materials from the office and the Contractor shall have no right to claim any demurrage/ compensation from the NSIC for the loss of job of its employees or whatsoever in as much as it is for the Contractor to deploy its men in such other sites or places and the said employees are under complete administration, supervision and control of the Contractor.

### **13. PENALTY:**

In the event of the Contractor's failure to execute the work entrusted to it under this Agreement satisfactorily, the NSIC shall make alternative arrangement to do it and the difference of cost incurred by the NSIC thereby shall be recovered from the Contractor's unpaid bills and Security Deposit.

14. The Contractor shall arrange, at his own expense, all **tools, tackles, safety PPEs** and other equipment required for execution of the work.

### **15. ACCIDENT OR INJURY TO WORKMEN:**

The NSIC shall not be liable for any damage or compensation payable in respect of or in consequence of any accident or injury to any workman or other person in the employment of the contract.

### **16. TIME PERIOD:**

The Contract shall be awarded initially for a period of one year and the same may be extended further based on the satisfactory performance as per same rates, terms and conditions.. However, extension of the contract shall be on the sole discretion of NSIC and service provider shall have no claim or right, whatsoever in this regard.

### **17. INCOME TAX/TDS/WCT/VAT:**

- a. Income tax including surcharge if any and TDS at the prevailing rate shall be deducted from the Contractor's bills as per the provision of Income Tax Act.
- b. The Contractor shall ascertain from the concerned commercial tax department regarding the applicability of Works Contract Tax / VAT/TIN. Necessary deductions will be made from the Contractor's bill as applicable.

### **18. PAYMENT TERMS:**

Wages paid by the Contractor to the persons employed shall not be less than the minimum wages prescribed under the minimum wages act fixed by the State Government or the Central Government from time to time, whichever is higher along with other statutory dues such as EPF, ESI, Bonus etc.

The payment to the Contractor shall be made on monthly basis on satisfactory completion of service on presentation of the bill. No advance payment will be made.

The bill shall be presented in duplicate within first week of every month, stating taxes separately along with service report duly endorsed by the Engineer-in-charge. As far as possible the payment will be released within two weeks from the date of submission of bills.

The following documents must accompany the bill, failing which the bill shall not be settled.

- a. Certified Attendance Sheet
- b. Duty Roaster for the succeeding month
- c. Challan/Slip for deposit of ESI
- d. Challan/Slip for deposit of EPF



- e. Received payment of wage sheet to employees for the preceding month.
- f. Deposit challan of service tax, as applicable for each preceding month.

The proof of remittance of statutory deductions of EPF, ESI to the appropriate agency, for those employed at NSIC, must be provided by the selected agency to NSIC every month along with the claim bill, failing which the claim bill shall not be settled. These remittance /payments must be made in a separate challan specifically for the contract personnel deployed at NISC.

#### **19. FORCE MAJEURE:**

Any delays in or failure of the performance of either party herein shall not constitute default hereunder or give rise to any claim for damages, if any, to the extent such delays or failure of performance is caused by occurrences such as Act of god or the public enemy; expropriation or confiscation of facilities by Government authorities, or in compliance with any order or request of any Governmental authorities or due acts of war, rebellion or sabotage or fires, floods, explosions, riots or illegal joint strikes of all the workers of all the Contractors.

#### **20. SECURITY DEPOSIT:**

Within fifteen (15) days of the award of contract, the selected Contractor shall furnish a Performance Security Deposit amounting to 5% of the annual value of the work order by way of Demand Draft to NSIC. The Security Deposit will be forfeited, in case the tenderer fails to execute the order to the satisfaction of NSIC. The Security Deposit amount shall remain with the NSIC till the end of contract plus additional one month and shall not bear any interest and shall be liable for forfeiture in case of the breach of any terms and conditions of the Contract.

Security Deposit shall be released only if it is accompanied by the proof of the following:

- a. Having handed over the complete establishment including all materials and equipment of the EMDBP in good condition.
- b. Having vacated the office premises or any other premises that may have been allotted to him for discharge of the contractual obligation.

The Earnest money already deposited by the selected Contractor shall be refunded after receipt of Security Deposit.

#### **21. ARBITRATION AND LAWS:**

Except where otherwise provided for in the contract all questions and disputes relating to the meaning of the specifications, designs, drawings and instructions herein before mentioned and as to the quality of workmanship or materials used onto work or as to any other question, claim right matter or thing whatsoever in any way arising out of or relating to the contract, designs drawings, specifications, estimates, instructions, orders and these conditions or otherwise concerning the works, or the execution or failure to execute the same whether arising during the progress of the work or after the completion or abandonment thereof shall be referred to the sole arbitration of the Chairman-cum-Managing Director of The National Small Industries Corporation Ltd. and if the Chairman-cum-Managing Director is unable or unwilling to act, to the sole arbitration of some other person appointed by the Chairman cum Managing Director, The National Small Industries Corporation Ltd. willing to act as such arbitrator. There will be no objection if the arbitrator so appointed is an employee of The National Small Industries Corporation Ltd. and that he had to deal with the matters to which the contract relates and that in the course of his duties as such he had expressed views on all or any of the matters in dispute or difference.

The arbitrator to whom the matter is originally referred being transferred or vacating his office or being unable to act for any reason as aforesaid at the time of such transfer, vacation of office or inability to act., Chairman and Managing Director, The National Small Industries Corporation Ltd. shall appoint another person to act, as arbitrator in accordance with the terms of the Contract. It is also a term of this contract that no person other than a person appointed by C.M.D., The National Small Industries

Corporation Ltd., as aforesaid should act as arbitrator and if for any reason, that is not possible, the matter is not to be referred to arbitration at all.

Subject as aforesaid the provision of the Indian Arbitration and Reconciliation Act, 1996, or any statutory modification or re-enactment thereof and the rules made there under and for the time being in force shall apply to the arbitration proceeding under this clause.

It is a term of the contract that the party invoking arbitration shall specify the dispute or disputes to be referred to arbitration under this clause together with the amount or amounts claimed in respect of each such dispute.

The arbitrators may from time to time with consent of this parties enlarge the time, for making and publishing the award.

The work under the contract shall, if reasonably possible continue during the arbitration proceedings and so payment due to payable to the Contractor shall be withheld on account of such proceedings.

The Arbitrator shall be deemed to have entered on the reference on the date he issued notice to both parties fixing the date of the first hearing. The Arbitrator shall give a separate award in respect of each dispute of difference referred to him.

The venue of arbitration shall be such place as may be fixed by the Arbitrator in sole discretion.

The award of the arbitrator shall be final, conclusive and binding on all parties to this contract.

The cost of arbitration shall be borne by the parties to the dispute, as may be decided by the arbitrator(s).

The Indian Laws shall govern this contract for the time being in force. The courts at New Delhi / Delhi only shall have the jurisdiction

**General Manager,  
NSIC-EMDBP, Hyderabad**

**(Authorized signatory of the tenderer with seal.)**

# FORM OF TENDER

To  
The General Manager,  
NSIC- Exhibition cum Marketing Development Business Park,  
Kamalanagar, Kushaiguda, ECIL Post Office, Hyderabad -500 062

I/We have read and examined the following documents relating to.....  
.....

**(Name of the Work)**

- a. Notice inviting tender.
- b. Instructions to Tenderers
- c. Checklist of document/fees/etc.
- d. General Conditions of Contract including Contractors, Labour Regulations, Model Rules for Labour Welfare and Safety Code appended to these conditions together with the amendments thereto if any.
- e. Appendix
- f. Special Conditions of Contract
- g. Scope of Work
- h. Annexure A
- i. Price Bid

I/We hereby tender for execution of the works referred to in the aforesaid documents upon the terms and conditions contained or referred to therein and in accordance in all respects with the specifications, designs, drawings and other relevant details at the rates contained in the Price Bid and within the period(s) of completion as stipulated in Appendix.

In consideration of I/We being invited to tender, I/We agree to keep the tender open for acceptance for 120 days from the due date of submission thereof and not to make any modifications in its terms and conditions which are not acceptable to the Corporation.

A sum of Rs 15000/- is hereby forwarded as Earnest Money Deposit in the form of Demand Draft in favour of NSIC Ltd. payable at Hyderabad. If I/We fail to keep the tender open as aforesaid or make any modifications in the terms and conditions of the tender which are not acceptable to the Corporation, I/We agree that the Corporation shall without prejudice to any other right or remedy, be at liberty to forfeit the said earnest money absolutely. Should this tender be accepted, I/We agree to abide by & fulfill all the terms conditions of aforesaid document.

If after the tender is accepted, I/we fail to commence the execution of the work as provided in the conditions. I/We agree that the Corporation shall without prejudice to any other right or remedy is at liberty to forfeit the said earnest money absolutely.

**Signature of tenderer.....**

**Duly authorized to sign the tender on behalf of the (in block capitals).....**

**Witnesses (Name, Address & Signature)**

1. ....

2. ....

## **APPENDIX**

- |    |  |  |
|----|--|--|
| 1. | Competent Authority  | C.M.D. NSIC or his<br>Authorized executives  |
| 2. | Estimated Value, Earnest money &<br>Security deposit   |  |
|    | a) Estimated Value   | Rs. 9.60 Lac   |
|    | b) Earnest money   | Rs 15,000/- in the form of<br>Demand Demand /Pay<br>Order/Bankers Cheque drawn on<br>any scheduled/nationalized in<br>favour of "The National Small<br>Industries Corporation Ltd.",<br>payable at Hyderabad |
|    | c) Security Deposit  | 5% of the contract value.  |
| 3. | Authority competent to decide if<br>"any other cause" of delay is beyond<br>Contractor's control | CMD, NSIC or his<br>authorized representative  |
| 4. | Authority competent to reduce<br>compensation  | CMD NSIC or his<br>authorized executive.   |

## **SPECIAL CONDITIONS OF CONTRACT**

- 1.** It is assumed that the parties submitting their offers are well aware about the site conditions, nature of work to be carried out etc. Non familiarity with site conditions shall not attract or construed any increase in the rates after acceptance of the offer.
- 2.** The rates quoted by the Contractor in the Price Bid shall include of Service charge, Applicable Taxes and Other statutory benefits such as EPF, ESI, Bonus etc. given to the personnel as per labour laws.
- 3.** The rates quoted by the Contractor shall be firm for acceptance for a period of 120 days from the date of submission of quotation.
- 4.** The personnel deployed by the Contractor shall always remain employee of the Contractor and in no case or circumstances whatsoever shall claim to be employee of the NSIC.
- 5.** The Contractor has to take necessary measures to avoid break down by adopting preventive & predictive maintenance. The electrical installations as mentioned in Annexure A together with fixtures, fittings, cables etc. provided inside as well as outside the building shall be periodically checked and shall be maintained in proper order.
- 6.** The Contractor will be responsible for all his employees in observing security and safety regulations and instructions as may be issued by the NSIC Office from time to time
- 7.** The Contractor shall employ only adult trained, efficient and responsible staff with good health and sound mind for operation and maintenance of electrical installation work. The Contractor shall ensure that the persons are punctual and disciplined and remain vigilant in performance of their duty. Persons so engaged by the Contractor shall be from amongst properly trained electrician of high integrity and good conduct. In no circumstances, persons below 18 years of age should be employed.
- 8.** The Contractor should provide Identity cards to its staff. In case of any change of staff by the Contractor, the Corporation should be informed in advance.
- 9.** In case the any material/property of the EMDBP office are damaged due to misuse or mishandling or carelessness by the Contractor or his employees, the Contractor will immediately inform the Engineer in charge. In such a case, the Contractor will be liable to replace the item at his own cost or the NSIC shall have the right to recover the loss from the Contractor's monthly bill.
- 10.** The personnel deployed by the Contractor shall perform their duties with due diligence and sincerity and shall not indulge in any unethical practices. If it is noticed that the personnel are involved in unethical practices, they shall be immediately replaced with suitable alternative without hampering the work.
- 11.** Proper log book for all the major installations as directed by Engineer-in-Charge shall be maintained.
- 12.** The materials supplied by the clients shall be used effectively and efficiently and wastage shall be avoided.
- 13.** During breakdown, the service engineer of the Contractor has to inspect and rectify the minor defects.
- 14.** The Contractor shall follow the provisions of the Electricity Act 2003 and the Regulations framed there under.
- 15.** After acceptance of the offer of the Contractor, the Contractor has to enter into an agreement with NSIC on non- judicial stamp paper of Rs. 100/- or requisite value whichever is higher, within 10 days of the award of the work. The cost of the non-judicial stamp paper shall be borne by the Contractor.
- 16.** The Contractor agrees that they are an independent business entity and not an employee or agent of NSIC. The Contractor further agrees that it is their sole duty to discharge all their legal and statutory responsibility including those mentioned herein irrespective of any factor or reason attributable to NSIC bear no responsibility whatsoever for any liabilities for legal or statutory matter.

- 17.** In case of replacement of any worn out part or defective part as the case may be, the Contractor shall carry out the same in consultation with Engineer-in-Charge and submit the bill for reimbursement.
- 18.** The Corporation does not bind itself to buy or produce any or all services/goods from the Contractor.
- 19.** The Corporation whose decision shall be final and binding shall check the supplied goods or services for quality and reserves the rights to reject the services/goods.
- 20.** The Contractor shall be responsible to submit the required bills or invoices for the services/goods supplied immediately along with applicable documents like copy of acknowledge delivery challans, quality/test certificate etc. Upon receipt of the relevant documents and after verification of their correctness, NSIC will reimburse or settle their bills. The Contractor has to ensure that all anticorruption laws including not offering any legal payments, benefits to any Government bodies or officials are compiled and also should not violate any other related local; government laws during the currency of the contract, including compliance of code of conduct and safety.
- 21.** Measures like smoking, drinking, abusing during the working hours is strictly prohibited and if found that the personnel engaged in such act shall be immediately replace with suitable alternative.
- 22.** If the Contractor does not fulfil the requirement of the technically qualified, experience & competent manpower, then the Corporation has a right to terminate the contract by giving a notice period of one month.
- 23.** The necessary statutory deduction as applicable shall be deducted from the amount payable to the Contractor and it is mandatory on the part of Contractor to provide PAN number, Service tax registration number etc. whenever asked for.
- 24.** The Contractor has to accept and are fully responsible for all the liabilities arising out with regard to any compensations /remunerations under any Statutory bodies of whatsoever nature of any major or minor or fatal accident or incident occurred /sustained by their personnel posted at NSIC site, during the course of discharge of their duties/functions inside or outside of the NSIC premises. The Contractor is also responsible to provide the insurance coverage to their personnel and submit the proof of such coverage to their personnel to the NSIC, whenever asked for.
- 25.** The Contractor shall be fully responsible to safeguard the equipment, materials, assets and other properties during their presence. The NSIC has every right to recover the amounts from the Contractor for any damages which arise due to negligence operation.
- 26.** The Contractor shall not involve themselves in any manner which is detrimental to the NSIC interest or associated themselves in any capacity with NSIC employees. The personnel deployed by the Contractor shall be disciplined by observing all rules and regulations of NSIC. In case of non-compliance, NSIC reserves the right to terminate the contract without any.
- 27.** All major preventive maintenance of transformers, HT panel, LT panel and Motors etc. will have to be preferably carried out on Saturdays, Sundays & holidays for which no overtime will be paid.
- 28.** All consumables like cotton waste, greases, Vaseline, fuses, tube rods, bulbs, chokes, starters, etc. would be supplied by the Corporation. It will be Contractor's responsibility to receive material and maintain proper inventory of the stock.
- 29.** The Contractor will be provided with a space in Annex building. The Contractor will keep the area allotted to you properly habitable and clean and would not allow storage of any unauthorized material.
- 30.** The Contractor have to coordinate the annual inspection by electrical inspector of Government or any other statutory inspections as may be required by the authorities. Any fees payable towards the inspection will directly be paid by us.

31. The contract shall be awarded to A Class licensed Electrical Contractor only. A copy of the valid electrical license shall be submitted along with the Technical Bid.
32. The Contractor has to ensure that the appropriate power factor is maintained and it should not fall below the minimum power factor prescribed by the Electricity supply Authority.
33. The Contractor should provide 2 sets of uniforms of approved color for the employees deputed in EMDBP at his own cost along with one pair of safety shoes along with Company Identity Cards.
34. The Contractor should provide Mobile Phones to Supervisor engaged under the contract in EMDBP Building.
35. The performance of the firm shall be reviewed in every quarter and if the performance is not found satisfactorily, the contract will be terminated by giving 15 days notice.
36. In case of weekly rest, public holiday, absenteeism, alternative arrangement i.e. Reliever who is equally qualified & experienced should be made by the Contractor.
37. If the Contractor fails to undertake the job satisfactorily or violates the terms conditions or not attending the work effectively, the Corporation has every right to cancel the contract and forfeit the security deposit without assigning any reason what so ever.
38. During working at site, some restrictions may be imposed by Engineer-in- Charge/Security staff of the Corporation or Local Authorities regarding safety and security etc., the Contractor shall be bound to follow all such restrictions/instruction & nothing extra shall be payable on this account.
39. *All communication should be addressed to the General Manager, NSIC-EMDBP, Kamalanagar, Kushaiguda, Post Office, Hyderabad - 500062.*

**(Authorized signatory of the tenderer with seal.)**

## **SCOPE OF WORK**

### **Brief Description of the 33/0.433kV Electrical System:**

The Electrical power requirement for NSIC-EMDBP is catered from M/s TSSPDCL (Telangana State Southern Power Distribution Corporation Ltd) through 33kV underground cable connected from Sainikpuri Substation. This cable terminates in an NSIC owned 33kV Switchyard consisting of two 33/0.433kV, 1500kVA transformers.

The Voltage is stepped down through transformer and is distributed to NSIC building through primary 2500A LT panel located in the Substation. The primary panel feeds power to all the floors in the buildings through secondary LT panels installed at each floor of the Building. The inductive load of the building is compensated by provide leading Vars through 500kVAR Automatic Power factor Correction Panels.

The emergency power system in the building is catered through 1010 kVA Diesel Generator set installed outside the substation. The DG sets is operated to feed power to the building upon failure of grid through an Auto mains failure panel installed in the substation. The fuel to the DG Set is fed from a 1000 litres tank located on the exterior wall of substation.

The details of major equipment installed in the Switchyard, Substation and EMDBP Building is mentioned is **Annexure - A**

The scope of the work includes the Operation and Maintenance of 33/0.433kV Electrical Power System of EMDBP Building comprising of 33kV Switchyard, 415V Substation and allied equipments such as power distribution panels, lighting fixtures, motors, motor starter, cables, exhaust fans etc.

The Operation and Maintenance shall include all the required tasks to ensure:

- Maximum System Reliability & Maximum system availability.
- Most Effective, Efficient and Optimum utilization of electrical system.
- Enhance the life expectancy of equipments.
- Compliance of safety rules and regulations.
- Maintenance (Preventive, Predictive & Break down maintenance).
- Maximum service to Lessees for maintaining uninterrupted power supply.
- Maintenance of proper records of operation and maintenance.

### **OPERATION**

- Operation of 33kV Circuit Breakers (VCB & SF6), Isolator, LT Panels consisting of ACBs, etc. according to load requirements and instructions from Engineer-in-Charge.
- Maintaining the Grid Voltage within prescribed limit through RTCC Panel.
- Maintaining the Power Factor close to unity through Automatic Power Factor Control Panels.
- Maintaining records of all the operations and records of loads such as voltage, current, power factor, frequency, connected load, energy consumption etc.
- Preparing daily, weekly and monthly energy report in the prescribed format and submitting the same to the Engineer-in- charge.



- Carrying out operations, Changeovers from Grid Power to DG Power and vice versa correctly and accurately and recording the same in the relevant Log Books.
- Maintaining records of Grid Power failures with reasons.
- Recording all tripping of breakers and other events that occur in the order of sequence with the time of occurrence and recording them in Log Book.
- Attending the faults and restoration of the power supply without delay.
- Switching ON/OFF of light fixtures, pumps, fans and other equipments as per NSIC Requirement.
- Ensuring alertness and attending to all operational activities promptly without any delay.
- Observing all safety precautions and ensuring safety of personnel, equipment and materials.
- Strictly following the instructions given by the Engineer-in-charge.

## **MAINTENANCE**

This Maintenance scope (preventive, predictive and breakdown) mentioned here is indicative only. Any other work necessary for the proper maintenance of the system as per relevant IS Specification and as per good engineering practices will have to be done by the Contractor in consultation with the Engineer-in-Charge of NSIC, so as to keep the system in a trouble free operational condition.

### **Breakdown Maintenance:**

Breakdown maintenance shall be provided as and when the situation warrants with a failure/fault in the system. The breakdown maintenance shall be attended at the highest priority so as to isolate the fault and restore the faulty equipment to its normal operational condition. For breakdown maintenance, the Contractor shall coordinate with Engineer-in-charge and the original equipment manufacturer (OEM) for replacement of parts and services as necessary. Infrastructure, tools and tackles and site support shall be provided by the Contractor for such jobs with priority and without any delay. OEM parts and services, if any, required for the completion of breakdown services shall be approved and cleared for execution by NSIC.

### **Predictive Maintenance**

Contractor shall ensure predictive maintenance by carrying out routine Surveillance to observe any predictable fault in electrical system such as Lighting Arrestors, CTs, PTs, Isolator, Circuit Breakers, Control Panels, Transformers, OLTC Panels, LT Distribution System, Lighting fixtures etc.

### **Preventive Maintenance**

All the electrical equipment shall be operated and maintained by the Contractor personnel in a specific and phased manner as per the schedule of work to avoid frequent break-down and to ensure maximum utilization of the equipment generally. The following activities are to be done during routine maintenance. The maintenance procedures which are not specified here but form a part of standard procedures are required to be carried out by the Contractor.

#### **1. TRANSFORMERS:**

- Capacity : 1500 KVA (PETE)
- Voltage : 33/0.433kV
- Quantity : 02 Nos.

### **Daily Maintenance:**

- a. Checking Oil & Winding temperatures on hourly basis against rated values and recording them in relevant log book.
- b. Observe and record parameters such as Load, Voltage, Frequency, Power Factor etc.
- c. Visual Inspection for overheating if any at terminal connections and observation for any unusual internal noise.
- d. Observation of oil levels in main conservator tank OLTC conservator and examining for oil leaks from the transformer, if any.
- e. To check noise/ humming sound, temperature rise (over heating) during the entire operation of the Transformers.
- f. Visual check of explosion vent diaphragm for any cracks.

### **Monthly Maintenance:**

- a. General cleaning of transformer, Inspection for any cracks or chippings of the bushing and checking of tightness of connections.
- b. Measurement of IR values of transformer and recording of the values specifying the temperature at which measurements are taken.
- c. Checking the colour of silica gel in the breather and also oil level of the oil seal. If silica gel colour changes from blue to pink then the silica gel is to be reconditioned or replaced.
- d. Checking of neutral earth and equipment body earth once in a year. The Agency is liable to furnish certificate for this work.

### **Quarterly Maintenance:**

- a. Testing of transformer oil of main tank & OLTC oil for BDV and moisture content
- b. Testing of Buchholz Relay, Oil Surge relays for correct operation.
- c. Checking of all connections on the transformer for tightness such as bushings, tank earth connection.
- d. Lubricating/greasing all moving parts of OLTC mechanism.
- e. Checking of neutral earth and equipment body earth once in a year. The Agency is liable to furnish certificate for this work.

### **Yearly:**

- a. Measurement of winding resistance.
- b. Measurement of Turns ratio test at all taps.

## **2. CIRCUIT BREAKERS:**

- Voltage Level: 33kV
- Quantity: 04 Nos.
- Type: Vacuum (1 No.) and SF6 (03 Nos.)
- Rating: 1600A and 800A

**Daily Maintenance:**

- a. Checking the SF6 Gas pressure.
- b. Checking the operation of Spring Charging Motor

**Monthly Maintenance:**

- a. Cleaning of circuit breaker body and bushings.
- b. Checking breaker Operation (Local/Remote operation).
- c. Checking the tightness of wires.
- d. Tightening of nuts and bolts.
- e. Checking anti-condensation protection.
- f. Checking and sealing of cable entry holes.
- g. Use of anti-corrosion spray where required.

**Quarterly Maintenance:**

- a. Checking the breaker for leakage of SF6 Gas.
- b. Oiling and greasing of all moving parts.
- c. Checking the operation of tripping and closing circuit.

**Half Yearly Maintenance:**

- a. Measuring the IR values of Power and Control Circuits.
- b. Checking the mechanism of the moving parts.
- c. Touch up painting wherever required.
- d. Operation of control and Auxiliary circuits.

**3. ISOLATOR:****Daily Maintenance:**

- a. Visual Inspection

**Quarterly Maintenance:**

- a. Checking for tightness of nuts and bolts, drive tube locknuts, drive lever and phase coupling plan bolts etc.
- b. Checking the contact surface for coating/wearing.
- c. Applying the contact grease after cleaning of the Isolator.
- d. Ensuring that all the mechanical components are firmly fixed and let the moving conductors operate freely.

**4. HT & LT PANELS:****Daily Maintenance:**

- a. Visual Inspection

- b. Checking whether indication lamps, selector switch, ammeter, voltmeters, energy meters etc., are working.
- c. Ensuring the closing of all the panel doors etc.
- d. Checking and ensuring the closing of all the panel doors etc.
- e. Checking whether all relays, are functioning properly.
- f. Checking of D.C. supply

**Quarterly Maintenance:**

- a. Visual inspection of panels.
- b. Checking of control scheme for healthiness.
- c. Visual Checking of Panel Meters.
- d. Checking of heater circuit & rectification if required.
- e. Checking handles and doors & rectification if required.
- f. Checking and sealing of cable entry holes.
- g. Tightening of all earthing connections.
- h. Checking of mechanical/electrical interlocks, interlocks within the switchboard to ensure proper functioning of same.

**Yearly Maintenance:**

- a. Measurement and recording of IR values for Main Bus bar.
- b. Checking of all terminations for tightness.
- c. Checking of CT, PT and Relays connections for tightness.
- d. Measurement of insulation resistance value of circuit breaker.
- e. Checking of control circuit.
- f. Visual inspection of earth connections and checking of tightness.
- g. Checking of mechanical and electrical interlocks, interlocks within the switch board to ensure proper functioning the same.
- h. Checking and sealing of cable entry holes

**5. 415V/230V POWER DISTRIBUTION DBS:**

**Daily Maintenance:**

- a. Visual inspection & proper doors closing.
- b. Check whether indication lamps, selector switch, ammeter, MCBs etc. are working.

**Quarterly Maintenance:**

- a. Check if all the panels are ingress protected.
- b. Checking of termination of incoming and outgoing cables
- c. Routing of cables for new loads if required (only flexible cables and indoor).
- d. At the time of adding new cable proper tags and ferruling must be done.

- e. Cleaning of the panel.
- f. Checking and sealing of cable entry holes.
- g. Tightening of all earthing connections.

## **6. EARTHING SYSTEM:**

- a. Checking the Value of earth resistance of the combined earth electrode (Equipment and neutral separately) twice in a year. The Contractor is liable to furnish Test certificate in this regard.
- b. Checking of earth leads to all equipment/panels/DB for its continuity after tightening all connection once in a year.
- c. Watering and salt addition for improvement of earth resistance and proper closing of earth pit chamber.

## **7. DIESEL GENERATOR SET:**

- Rating : 1010 kVA
  - Quantity: 01 No.
  - Make: Cummins
- a. Supervisor and the Electricians should have thorough knowledge of the functioning of various accessories of the DG sets and associated electrical panels.
  - b. Sensing the failure of grid power the DG set should start in AUTO mode, but if the DG Set fails to start in AUTO mode then the Supervisor/Electrician should immediately start the DG set manually.
  - c. The DG should be tested under trail run twice in a week in consultation with Engineer In-Charge to check the operating conditions of the DG Sets.
  - d. The DG Log Book should specify the DG Set operational time, diesel consumed, units consumed due to failure of TSSPDCL supply or for any other reason such testing, maintenance etc.
  - e. The Supervisor/Electrician shall check the health of the Battery (Specific Gravity, Electrolyte & Water Level etc.), Charging voltage & Battery voltage on daily basis.
  - f. The quantity of Diesel should be assessed from time to time and should be noted in the log book. The Diesel requirement should be periodically assessed by the Contractor and requirement should be provided to the Engineer-in-Charge. Pumping of the Diesel from the storage drum to Diesel tank shall be carried out by the Contractor and no extra charge shall be payable for this activity.
  - g. The Contractor should also arrange for transportation and handling of Diesel from nearest Diesel station to individual sub-station. The cost of transportation & handling charges shall be borne by NSIC at actual.
  - h. *The DG set in under AMC with its authorized service agency. The Supervisor/Electrician should liaison with the DG Set AMC service agency for any abnormality noticed in the functioning of the DG Sets and if any fault occurs, the same should be and should be communicated to Engineer In-charge and simultaneously the Supervisor/Electrician should call the DG Set AMC service agency and get the faults rectified.*

## **8. CABLE NETWORK:**

- a. Visual inspection of cables.
- b. Checking all cable terminals & joins for overhauling /loose connections and tightening,

terminating, rejoining, if required termination will be done by the Contractor and material will be provided by NSIC.

- c. Annual Checking and recording of IR values of all cables with Megger of suitable range.

## **9. LIGHTING FIXTURES, SWITCHES, SOCKETS, MOTOR-PUMPS, FANS ETC:**

Routine maintenance/servicing of all Light fixtures, replacement of Lamps, ballast, Ignitors, fans, exhaust fans, motor (except rewinding), Plugs, sockets, Switches, Fuses, etc. located at various locations in the sub-station and EMDBP Building.

## **10. OTHER WORKS:**

- a. All related minor works such as drilling of holes, soldering, fixing of lighting fixtures, fixing of additional switches with necessary additional wiring, Cable saddling, etc. shall be carried out by the Contractor. No additional charges for labour shall be paid on this account. However, material cost shall be borne by NSIC.
- b. Replacement for old defective circuits, replacement of lighting cables / components, disconnection of cables, etc. shall be carried out by the tenderer at no additional charges. However, any material changes required for this work shall be borne by NSIC.

## **11. LIAISON WITH STATUTORY AUTHORITIES:**

The tenderer has to maintain liaison with statutory authorities like the TSSPDCL, TSTRANSCO, Electrical Inspector and other Government Agencies related to all electrical matters of the Switchyard.

Attend to State Electrical Inspector and arrange the annual electrical inspection of the building and sub- station and any other related work, if necessary. It is the tenderer's responsibility to obtain the clearance/approval from the State Electrical Inspector during annual inspection of electrical installations of this building. Any fees payable towards the inspection will directly be paid by NSIC.

- ❖ *NOTE: The scope of work as mentioned above are the minimum expected from the firm/agency/Contractor apart from break down maintenance and any other work required for operation and maintenance of electrical system in proper way as per good engineering practices will be required to be done under this scope of work.*

## **TOOLS, TACKLES & SAFETY PPES:**

All tools, tackles & Safety Personal Protective Equipment (PPE) required for the safe and satisfactory operation and maintenance including preventive and breakdown maintenance of the substation and related equipment shall be provided by the tenderer at his own cost and accordingly the tenderer should quote his rate in the price bid. The careful maintenance and management of these tools will be the responsibility of the agency.

Hence on the day of starting the contract, the tenderer should place the following tools, instruments and Safety PPE at site.

- a. Discharge rods suitable for 33kV Line Discharging with heavy duty clamps – 6 Nos.
- b. All sizes of double ended, Ring, Tubular & Box Spanners - 1 sets each.

- c. Complete set of all sizes of screw drivers - 2 sets
- d. Hydrometer – 1 No.
- e. BIS approved, 33kV Insulating Hand Gloves – 2 Sets
- f. BIS approved Safety Helmets - 2 Nos.
- g. Safety Belts – 2 Nos.
- h. Safety Shoes – 5 Sets
- i. Torch – 2 Nos.
- j. Rain coats and gum boots – 2 Sets
- k. 1kV Insulation tester – 1 No.
- l. Multi meter – 1 No.
- m. Tong tester – 1 No.
- n. Cable crimping tools of adequate capacity – 1 No.
- o. Phase Sequence meter – 1 No.
- p. Pliers, Hammer, Wire Stripper etc & Pipe Wrench – 1 No. each

## ANNEXURE –A

### A. Major Electrical Equipment/Installation in 33/0.433kV Substation

S.No	Description of Equipment	Quantity
1.	ABB Make, 1600A, Outdoor Vacuum Circuit Breaker with outdoor control and Relay panel.	01 No.
2.	Air Break Switch/ Isolator.	01 No.
3.	PETE Make, 1500kVA, 33/0.433kV Transformers and their associated 2500A Busducts.	02 Nos.
4.	HV Switchboard comprising of 3 Nos. Kirloskar make, 33kV, 800A, SF6 Circuit Breakers (1 Incomer & 2 Outgoing feeders) and associated relay & metering panel at Transformer yard for feeding incoming supply to respective Transformers.	01 Set.
5.	Lighting fixtures, Earthing system, HT & LT power & Control Cables.	01 Lot.
6.	Cummins make, 1010 kVA DG Set for backup during grid power failures – Only <b>Operation</b> as the AMC of the DG Set is with authorised service agency.	01 No.

### B. Major Electrical Equipment/Installation in 415V Substation

S.No	Description of Equipment	Quantity
1.	Remote tap changing control (RTCC) panel for the 33/0.433kV Transformers consisting of Emco make AVR and Display Unit.	02 Nos.
2.	415V, 2500A LT Power control center for feeding power to various Power Distribution Panels, Exterior Lighting DB consisting of following: i. 2500A, 4 Pole, EDO ACB - 4 nos. ii. 3200A, 4 Pole, EDO ACB - 1 no. iii. 800A TPN MCCB – 6 Nos. iv. 630A TPN MCCB – 1 Nos. v. 400A TPN MCCB – 1 Nos. vi. 160A TPN MCCB – 1 Nos. vii. 100A TPN MCCB – 8 Nos.	01 No.
3.	Automatic Power Factor Correction (APFC) Panel with 14 step Reactive Power Manager - RPM14 (M/s L&T Make) each consisting of following. i. 800A TPN MCCB - 1 nos. ii. 300A TPN MCCB - 1 Nos. iii. 125A TPN SDFU - 6 Nos. iv. 63A TPN SDFU - 2 Nos. v. 32A TPN SDFU - 4 Nos. vi. 120 kVAR Capacitor- 1 No. vii. 50 kVAR Capacitor- 6 Nos. viii. 25 kVAR Capacitor- 2 Nos.	02 Nos.



	ix. 10 kVAR Capacitor- 2 Nos. x. 5 kVAR Capacitor- 2 Nos.	
4.	Auto Mains Failure (AMF) panel with associated busducts and consisting of 4 nos. 1600A, 4 Pole, EDO ACB.	01 No.
5.	All other equipment connected with the system including HT & LT Power cables, control cables and earthing system.	01 Lot.

### **C. Major Electrical Equipment/Installation in EMDBP Building**

<b>S.No.</b>	<b>Description of Items</b>	<b>Quantity</b>
<b>1.</b>	<b>LT Panels</b>	
a.	415V Power Distribution Panel consisting of following i. 800A TPN MCCB - 1 nos. ii. 100A TPN MCCB - 14 nos. iii. 63A TPN MCB - 4 Nos.	04 Nos.
b.	415V Power Distribution Panel consisting of following i. 630A TPN MCCB - 1 nos. ii. 100A TPN MCCB - 4 nos. iii. 63A TPN MCB - 16 Nos. iv. 32A TPN MCB – 12 Nos	01 No.
<b>2.</b>	<b>Lighting Fixtures</b>	
a.	1x36W fluorescent light fixtures	123 Nos.
b.	1x11W Compact fluorescent lamp (CFL) light fixtures	170 Nos.
c.	1x18W CFL light fixtures	18 Nos.
d.	1x14W CFL light fixtures	05 Nos.
e.	2x18W Recess CFL based light fixtures Square type	272 Nos.
f.	2x18W Recess CFL based Downlighter	06 Nos.
g.	2x42W Recess CFL based Downlighter	06 Nos.
h.	1x26w CFL based Down Lighter	46 Nos.
i.	1x50w Halogen based Spot Lights	41 Nos.
j.	1x70W MHL Suspended Lighting Fixtures	28 Nos.
k.	1x70W Focus Light	14 Nos.
l.	70W MHL Outdoor pathway lights	83 Nos.
m.	70W MHL Downlighters	7 Nos.
<b>3.</b>	<b>Electrical Fixtures</b>	
a.	6A Finger Touch Switches	424 Nos.
b.	6/16A Switches & Sockets	160 Nos.
c.	4 Way Distribution Boxes	9 Nos.
d.	5 Way Distribution Boxes	8 Nos.
e.	10A, 1P MCB	181 Nos.
f.	20A, 1P MCB	54 Nos.
g.	32A, 3P MCB	11 Nos.
h.	40A, 3P RCCB	13 Nos.
i.	63A, 3P RCCB	7 Nos.
j.	32A Metal Clad Sokes	12 Nos.

k.	Exhaust Fans	151 Nos.
<b>4.</b>	<b>LT Cables of various sizes</b>	1 Lot
<b>5.</b>	<b>Cable Trays</b>	
a.	900 mm wide MS cable Tray	500 M
b.	100 mm wide MS cable Tray	450 M
<b>6.</b>	<b>Earthing Systems Lightning Protection systems</b>	
a.	Earth pit: 600 mm x 600mm Cu Plate with 4.5mm long & 40mm dia. GI Pipe.	36 Nos.
b.	50mm x 6 mm GI Strip	250 M
c.	25 mm x 3 mm GI Strip	1000 M
d.	Earthing Wire of Various Sizes	1 Lot.
e.	Early Streamer Emission Lightning Arrestor, INGESCO Make, PDC Model with associated earthing strip and other accessories	1 No.

**PRICE BID FOR OPERATION AND MAINTENANCE OF 33/0.433KV SUBSTATION AND OTHER ELECTRICAL INSTALLATIONS AS PER THE SCOPE OF WORK**

S.No.	Description	Percentage (%)	Rate per Month (in Rupees)	
			Supervisor Highly Skilled	Electrician Skilled
1	Basic Wage plus Variable Dearness Allowance (VDA)	As per latest Minimum Wages Act declared by State Government or Central Government, whichever is higher		
2	Employees State Insurance (ESI)	4.75% of Basic Wage plus VDA		
3	Employees Provident Fund (EPF)	13.36% of Basic Wage plus VDA (Including 12% PF, 0.5% EDLI and 0.86 Administrative charges for EPF & EDLI)		
4	Bonus	As per Bonus act		
5	<b>Sub Total -1</b>	Sum of S.No. (1) to (4)		
6	Electrician Reliever Charges (including rest days, leaves, holidays etc.)	1/6 <sup>th</sup> of S.No. 5	-	
7	<b>Sub Total -2</b>	Sum of S.No. (5) & (6)		
8	Contractor's Service Charge which should include all expenditure on providing managerial/supervisory/administrative services by all means including cost of uniform, safety PPEs, tools etc.	as a _____ percentage of S.No.(7) <i>(Please Mention the Service Charge in % here)</i>		
9	<b>Sub Total -3</b>	Sum of S.No. (7) to (8)		
10	Applicable Service Tax	15% of S.No. (9)		
11	Total Rate Per Employee	Sum of S.No. (9) & (10)		
12	No. of Employees	-	1 No.	3 Nos
13	<b>Grand Total</b>	Multiplication of S.No. (11) & (12)		

Grand Total in words.....

**NOTE:**

- *The Contractor's Service Charge quoted by the tenderer shall remain unchanged during the period of contract.*
- *Any increase/additional claim in minimum wages along with proportional increase in the ESI, EPF, Bonus, Reliever Charges and Contractor Service Charges will be borne by NSIC, however this additional claim shall be settled only on submission of bills duly supported by the Government Orders to that effect, after due examination by NSIC. Similarly any change in the statutory levies (ESI, EPF, Bonus, Service Tax) will also be applicable automatically.*

(Authorized signatory of the tenderer with seal.)